



Francisco Cardama, S.A.

SHIPYARD AND DRY DOCK

SHIPBUILDING
SHIP REPAIRING
NAVAL CARPENTRY
MECHANICAL
BOILER WORKING
PIPING

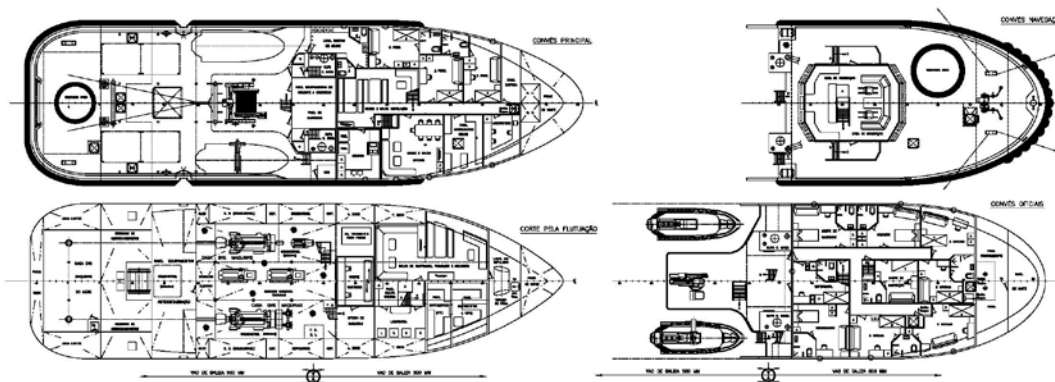
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Name of the vessel:	KWANZA
Shipowner:	Maritime and Port Institute of Angola (IMPA)
Type of vessel:	Multipurpose (tugboat, rescue, fire fighting, anti-pollution, etc.)
Building:	C – 234
Delivery date:	June 2013

MAIN PARTICULARS

Length overall:	44,00 mtrs.
Maximum Breadth:	12,20 mtrs.
Depth:	6,05 mtrs.
Draft:	5,15 mtrs.
Classification Society:	Lloyd's Register + 100 A1 + LMC Tug/FiFi 1; Oil Recovery

GROSS TONNAGE, POWER AND SPEED. ENDURANCE.

Gross Tonnage (GT):	878
Maximum engine continuous range power of CATERPILLAR 3516 C:	2 x 1.874 = 3.728 kW
2 fixed pitch propellers:	2,7 m diameter
Bow Thrusters:	300 CV, hydraulic
Generators sets:	2x250 kVA
Harbour generator set:	1x86 kVA
Trial speed:	Above 15 knots
Bollard pull:	60 ton.
Provisions endurance:	30 days (approx.)
Crew:	13 people
Passengers:	12 people

CAPACITIES

Fuel tanks for its own use:	370 m ³
Waste hydrocarbons tanks:	125 m ³
Portable tanks for hydrocarbons:	150 m ³
Fresh water tanks:	25 m ³
Foam tanks:	10 m ³

OTHERS

This vessel has been designed for:

- ➔ Search and Rescue operations with 2 lifeboats with 7,2 m and 33 knots.
- ➔ Towing manoeuvring at open sea with winch and towing hook.
- ➔ External fire fighting equipment, according with class notation FiFi1.
- ➔ Fighting against hydrocarbon pollution with recovery and storage by means of 300 m. boom with reel, 2 skimmers with a capacity of 60 Ton/h each, 6 portable tanks, etc.
- ➔ Buoy and beacon laying, with one deck crane with a capacity of 5,4 ton at 11,1m.
- ➔ Transport of fresh water and fuel to other vessels at open sea.
- ➔ Marine control and inspection activity in the country.
- ➔ Training of people related to sea.